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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/528,371 03/18/2005 Seiji Kagawa Q86813 4689

23373 7590 04/17/2007  
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EXAMINER

O HERN, BRENT T

ART UNIT

PAPER NUMBER

1772

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/17/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/528,371		KAGAWA, SEIJI	
	<b>Examiner</b>		<b>Art Unit</b>	
	Brent T. O'Hern		1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8, 10 and 12-64 is/are pending in the application.
- 4a) Of the above claim(s) 9, 10, 12, 19-57 and 61-64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 10 and 12-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claims***

1. Claims 1-6, 8-10 and 12-64 are pending.

## **WITHDRAWN REJECTIONS**

2. The 35 U.S.C. 112, second paragraph rejections of claims 1-8, 13-18 and 58-60 of record in the Office Action mailed 19 October 2006, page 2, paragraph 2 have been withdrawn due to Applicant's amendments in the Paper filed 20 February 2007.
3. The 35 U.S.C. 102(b) rejections of claims 1-8, 13-15, 17 and 58-60 as being anticipated by Tavss et al. (US 5,407,742) of record in the Office Action mailed 19 October 2006, page 3, paragraph 3 have been withdrawn due to Applicant's amendments in the Paper filed 20 February 2007.
4. The 35 U.S.C. 103(a) rejection of claim 16 as being as being unpatentable over Tavss et al. (US 5,407,742) in view of Kobayashi et al. (US 6,543,208) of record in the Office Action mailed 19 October 2006, page 7, paragraph 4 have been withdrawn due to Applicant's amendments in the Paper filed 20 February 2007.
5. The 35 U.S.C. 103(a) rejection of claim 18 as being as being unpatentable over Tavss et al. (US 5,407,742) of record in the Office Action mailed 19 October 2006, page 8, paragraph 5 have been withdrawn due to Applicant's amendments in the Paper filed 20 February 2007.

## **NEW REJECTIONS**

6. Claims 1-6, 8, 13-15, 17 and 58-60 are rejected under 35 U.S.C. 102(b) as being anticipated by Tavss et al. (US 5,407,742).

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Regarding claims 1-6, 8, 17 and 60, Tavss ('742) teaches a shape-memory polybutylene terephthalate laminate film/(package sheet) (*col. 3, ll. 29-34 and FIGs-1 and 2, #10*) comprising (a) a polybutylene terephthalate film, and (b) a metal foil (*col. 3, ll. 39-40 and FIGs 1-2, #13*).

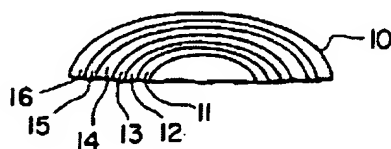


FIG. 1

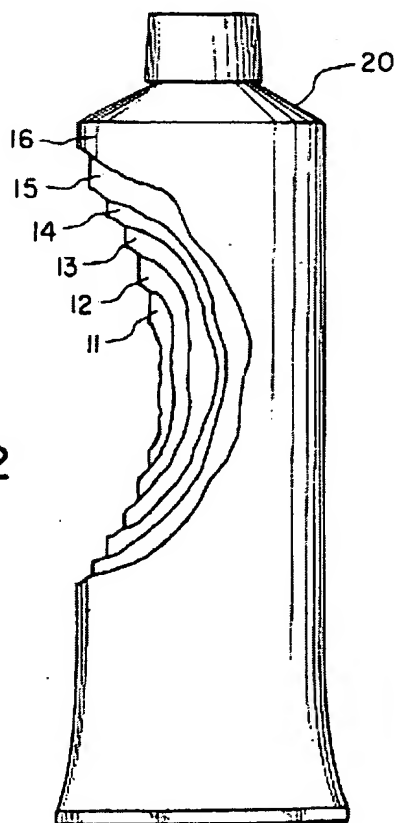


FIG. 2

The phrase "which is subjected to a shaping treatment to the first shape at a temperature  $T_1$  equal to or lower than the glass transition temperature of said polybutylene terephthalate, deformed to a second shape at a temperature  $T_2$  higher

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than said glass transition temperature, and then cooled to a temperature  $T_3$  equal to or lower than said glass transition temperature so that said laminate film is fixed to said second shape, said polybutylene terephthalate laminate film substantially recovering said first shape from said second shape when exposed to said temperature  $T_1$  or higher, wherein said first shape is a curled shape, and said second shape is substantially a flat shape or an oppositely curled shape" in claim 1, lines 3-11

"wherein said temperature  $T_1$  is 35 °C or lower, said temperature  $T_2$  is higher than 45 °C and 65 °C or lower, and the temperature  $T_3$  is 15 to 25 °C" in claim 2, lines 2-3;

"wherein said temperature  $T_1$  is 15 to 25 °C" in claim 3, line 2;

"which is subjected to a shaping treatment to the first shape at a temperature  $T_4$  higher than the glass transition temperature and lower than the melting point of said polybutylene terephthalate, cooled to a temperature  $T_5$  equal to or lower than said glass transition temperature so that said laminate film is fixed to said first shape, deformed to a second shape at a temperature  $T_6$  higher than said glass transition temperature and lower than said  $T_4$ , and then cooled to a temperature  $T_7$  equal to or lower than said glass transition temperature so that said laminate film is fixed to said second shape, said polybutylene terephthalate laminate film substantially recovering said first shape from said second shape when exposed to said temperature  $T_4$  or higher, wherein said first shape is a curled shape, and said second shape is substantially a flat shape or an oppositely curled shape" in claim 4, lines 3-13;

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"wherein said temperature  $T_4$  is 75 to 100 °C, said temperature  $T_5$  is 40 °C or lower, said temperature  $T_6$  is 45 to 65 °C, and said temperature  $T_7$  is 40 °C or lower" in claim 5, lines 2-3;

"wherein said temperature  $T_4$  is 90 to 100 °C" in claim 6, line 2;

"wherein said first shape is a tray shape, and said second shape is a flat shape" in claim 8, lines 2-3; and

"wherein said polybutylene terephthalate film is formed: by ejecting a humid air through a first cooling ring disposed near an annular die to cool a neck portion of a bubble to 130 °C or lower; by ejecting a humid air through a second cooling ring disposed above the annular die by the distance 5 to 10 times the opening diameter of the annular die to cool said bubble to 80 °C; and by keeping the temperature around a cylindrical net disposed between said first cooling ring and said second cooling ring constant to stabilizing the temperature of said bubble cooled by said first cooling ring and said second cooling ring; at a blow-up ratio of 1.5 to 2.8, a resin extrusion temperature of 210 to 250 °C, and a resin-extruding pressure of 9.8 to 13.7 Mpa" in claim 60, lines 2-10 are process limitations in product claims and hence not given any patentable weight since patentability of a product does not depend on its **method** of production (see *MPEP* § 2173.05(p)).

Regarding claim 13, Tavss ('742) teaches a film which has a layer structure comprising the polybutylene terephthalate film (*col. 3, ll. 32-33 and FIGs 1-2, #11*), the paper sheet (*col. 3, ll. 49-50 and FIGs-1-2, #15*) and a sealant film in this order (*col. 3, ll. 50-51 and FIGs 1-2, sealant #16*).

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Regarding claim 14, Tavss ('742) teaches a film which has a layer structure comprising said polybutylene terephthalate film, the paper sheet, a rigid film and a sealant film in this order (*FIGs 1-2, #16, #15, #13 and #11 from the outside to the inside*).

Regarding claim 15, Tavss ('742) teaches a film which has a layer structure comprising said polybutylene terephthalate film, a rigid film and a sealant film in this order (*FIG-1, #11, #12, and #16 from the inside to outside*).

Regarding claims 58-59, Tavss ('742) teaches a film wherein the polybutylene terephthalate laminate film adheres to another film or film laminate (*col. 3, ll. 37-50*).

The phrase "in a state where the elongated polybutylene terephthalate laminate film keeps an elastic recovery force" in claim 58, lines 3-4 and "where the polybutylene terephthalate laminate film is stretched by 1 to 3%" in claim 59, line 3 are not given any patentable weight since the applicant is introducing non-structural **functional language** into the product claims (*See MPEP 2173.05(g)*).

### ***Claim Rejections - 35 USC § 103***

7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tavss et al. (US 5,407,742) in view of Kobayashi et al. (US 6,543,208).

Tavss ('742) teaches the film discussed above, however, fails to expressly teach a light-screening ink layer on a surface of the polybutylene terephthalate film on the side of the paper sheet, or on a surface of a rigid film on the side of the sealant film.

However, Kobayashi ('208) teaches a light-screening ink layer on a surface of a rigid film on the side of the sealant film (*col. 4, l. 60 to col. 5, l. 1*) for the purpose of protecting the ink from the external environment (*col. 5, ll. 8-11*).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to modify Tavss's ('742) laminate with a light-screening ink layer on a surface of a rigid film on the side of the sealant film as taught by Kobayashi ('208) in order to protect the ink from the external environment.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tavss et al. (US 5,407,742).

Tavss ('742) teaches the film discussed above, however fails to expressly teach a container lid constituted by the shape-memory polybutylene terephthalate laminate film, however, Tavss ('742) teaches the use of the above packaging film to protect the packaged product (*col. 3, ll. 32-56*) for the purpose of decreasing the degree of flavorant absorption (*col. 2, ll. 51-52*). Therefore, it would have been obvious to incorporate the film into a lid in order to provide a lid with decreased flavorant absorption.

#### **ANSWERS TO APPLICANT'S ARGUMENTS**

9. In response to Applicant's argument (*p. 17, para. 1 to p. 19, para. 2 of Applicant's Paper filed 19 October 2006*) that Tavss ('742) does not teach a polybutylene terephthalate laminate film of amended independent claim #1, it is noted that Applicant teaches a film and wherein said film comprises polybutylene terephthalate and Tavss ('742) clearly teaches a film and wherein said film comprises polybutylene terephthalate. Whether Tavss ('742) teaches additional polymers, such as polyethylene, is irrelevant since Applicant has not negatively limited or excluded other polymers. Thus, Tavss ('742) clearly teaches all of Applicant's limitations in amended independent claim #1.

10. In response to Applicant's argument (*p. 19, para. 3 to p. 20, para. 2 of Applicant's Paper filed 19 October 2006*) that Tavss ('742) does not teach amended claim #4, it is



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noted that Applicant has not provided any analysis to support said conclusion.

Furthermore, Tavss ('742) teaches all limitations of amended claim #4 as discussed above.

11. In response to Applicant's argument (*p. 20, para. 4 to p. 22, para. 2 of Applicant's Paper filed 20 October 2006*) that Tavss ('742) does not teach amended claim #16, it is noted that Applicant mentions teachings of the references, however, has not provided any analysis to support said conclusion.

12. In response to Applicant's argument (*p. 22, para. 3 to p. 23, para. 3 of Applicant's Paper filed 20 October 2006*) that Tavss ('742) does not teach the curled and flat features of claim #18, it is noted as discussed above that said language refers to process limitations and are not given any patentable weight as discussed above.

13. In response to Applicant's argument (*p. 24, paras. 4-5 of Applicant's Paper filed 20 October 2006*) that patentable weight should be given to the process limitations, Applicant is advised to present structural limitations for any such additional structure Applicant wishes to claim.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571) 272-0496. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-2172. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Brent T O'Hern  
Examiner  
Art Unit 1772  
April 9, 2007

  
NASSER AHMAD  
PRIMARY EXAMINER 4/12/07